



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

JUN 11 2008

Mr. Doug Watson  
Sr. Project Manager  
Coastal Environmental Services  
15714 Downford, Ste. B-1  
Tomball, Texas 77377

RE: Waiver of Performance Testing for Specific Process Equipment at the Gulf Reduction Corp. ("GRC") Dust Manufacturing Division and Metal Division facilities located in Houston, Texas, subject to 40 CFR Part 63 Subpart TTTTTT – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Nonferrous Metals Processing.

Dear Mr. Watson:

This letter is in response to your waiver request dated February 22, 2008, for performance testing of specific area sources located at the following GRC Secondary Nonferrous Metal facilities:

GRC Dust Manufacturing Division  
6020 Esperson St.  
Houston, Texas  
TCEQ Air Permit No. 2537

GRC Metal Division  
6020 Navigation Blvd  
Houston, Texas  
TCEQ Air Permit No. 32201

On behalf of GRC, you have requested a waiver specific to particulate matter testing for certain source units at both facilities, on the premise of "identical" source emissions and control equipment located at the same facility. The United States Environmental Protection Agency (EPA) has considered the following in responding to your requests:

1. Historical data does not exist for either of the GRC facilities referenced above (personal communication between Doug Watson and Cynthia Kaleri, June 3, 2008).
2. The compliance date is the same as the rule issuance date (December 26, 2007), and although GRC submitted a timely waiver request, EPA has just completed an evaluation of that request.
3. GRC has made a good faith effort to provide a testing proposal that is believed to be technically sufficient and representative of worst-case emissions in demonstrating compliance of GRC's specific process unit operations at each facility subject to the rule.

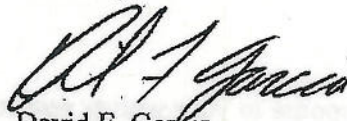
EPA conditionally approves a waiver specific to particulate matter testing for certain source units, as delineated in Enclosure 1 to this letter. As a condition of this approval, GRC understands that particulate matter (PM) test data for certain source units and their associated air

pollution control equipment will be used in lieu of testing other "identical" emission sources for PM in order to demonstrate compliance with the standard.

In accordance with 40 CFR 63.11467(g) and 63.11469, GRC will have 60 days from completion of performance testing to submit their Notification of Compliance Status to EPA. EPA will evaluate the data and information provided in GRC's Notification of Compliance Status to finalize the waiver request approval in accordance with 40 CFR 63.7(h)(4) or to require further testing in accordance with 40 CFR 63.7(h)(2).

As specified in Enclosure 1, if any new information becomes available or process unit operations are changed, this determination may become void and a new determination may be necessary. If you have any questions or concerns about this determination, please feel free to contact Ms. Cynthia J. Kaleri of my staff at (214)665-6772.

Sincerely,



David F. Garcia  
Associate Director  
Air/Toxics Inspection and Coordination Branch

Enclosure

cc: Jeff Greif (TCEQ, Austin)  
Susan Fairchild (EPA OAQPS)  
Scott Throwe (EPA OECA)



## **Enclosure**

### **GRC Performance Testing**

Gulf Reduction Corporation (GRC) has submitted a test waiver request for specific area sources located at the following Secondary Nonferrous Metal facilities:

Dust Manufacturing Division  
6020 Esperson St.  
Houston, Texas  
TCEQ Air Permit No. 2537

Metal Division  
6020 Navigation Blvd  
Houston, Texas  
TCEQ Air Permit No. 32201

The following summary provides our understanding for the testing to be conducted at each facility, from the information provided by Coastal Environmental Services, Inc., on behalf of GRC (letter dated February 22, 2008), as well as personal communication with EPA Region 6 representative, Ms. Cynthia Kaleri on June 3, June 6, and June 10, 2008).

#### **GRC Dust Manufacturing Division**

GRC's Dust Manufacturing Division ("DMD") facility produces zinc dust (a fine powder) by first melting secondary zinc materials and then distilling the molten zinc into a vapor and condensing the vapor to form zinc dust. The zinc dust is then taken to Dust Mills where it is screened, classified, and packed for shipment.

Twenty-eight (28) affected sources that are subject to the NESHAP for Secondary Nonferrous Metals Processing have been identified at the DMD facility. Of these sources, there are twenty-four (24) furnace sources (distillation furnaces and melting pots) and four (4) dust mill sources. Twenty (20) furnace sources share identical characteristics and two (2) zinc dust mill sources share identical characteristics.

Eight (8) baghouses are used to control emissions from all of these affected sources. Two (2) baghouses provide control for specific groups of Furnaces and Melting Pots while the other two (2) provide control for the balance of the Furnaces. Four (4) baghouses provide control for the specific operations within the Dust Mill groups. Specifically, each Dust Mill has one baghouse for the screening and packing of the zinc dust, and the other is part of the classification process.

At GRC's operation, all of the furnaces (both low and high temperature, respectively) are of the same size and operated in the same fashion (i.e., temperature, charge amount, melting times, furnace enclosures). This provides for a high level of quality control in the final product and maintains the Special Provisions of GRC's TCEQ permit.

To demonstrate compliance with the rule for the furnace groups, GRC proposes to test the baghouses that control Furnace Groups 2-D and 4-D. These two groups represent a mixture of GRC melting devices identical to Furnace Groups 1-D and 3-D, respectively, but have the



highest potential to emit particulate matter to a single baghouse due to an increased number of retort furnaces being managed within each group (See Table 1).

For the mill groups, GRC proposes to sample the baghouses that provide control of emissions for unit operations within Mill Group 2-D. This mill group consistently produces a higher volume than Mill Group 1-D (e.g., Mill Group 2-D has produced approximately 42% greater volume than Mill Group 1-D).

Testing to be performed at each baghouse will occur at the atmospheric discharge point. GRC will execute performance testing parameters as set forth in 40 CFR §63.11466 for each baghouse to be tested. This test calls for EPA Method 5 and the supporting test methods to acquire data for Method 5.

The outlet grain loading or baghouse efficiency data collected from tested sources will then be used as data in lieu of ("DILO") testing for the remaining sources. GRC would assume that other baghouse discharge grain loadings would be less than the tested sources since the tested sources would have the greatest potential for loading. Additional testing of all control devices will not be required if the tested sources are within the limitations set forth in 40 CFR §63.11465(a) of either 0.015 gr/dscf or a 99.0% control efficiency or better.

**Table 1 – Testing for GRC's DMD Facility**

Source Group	Type of Source	Source ID	Emissions Control	Proposed Test
Furnace Group 1-D	Retort	RET-16, RET-17, RET-18	Baghouse BH-24	DILO (FGp 2-D)
	Melting Pots	MP-4, MP-5, MP-6		
Furnace Group 2-D	Retort	RET-3, RET-4, RET-7, RET-8	Baghouse BH-25	Yes
	Melting Pots	MP-1, MP-2, MP-3		
Furnace Group 3-D	Retort	RET-1, RET-2, RET-5, RET-6	Baghouse BH-26	DILO (FGp 4-D)
Furnace Group 4-D	Retort	RET-9, RET-10, RET-11, RET-12, RET-13, RET-14, RET-15	Baghouse BH-31	Yes
Mill Group 1-D	Zinc Dust Mill	Dust Mill #1	Baghouse BH-29	DILO (DM#2)
		Classifier-Dust Mill #1	Baghouse BH-36	DILO (CDM#2)
Mill Group 2-D	Zinc Dust Mill	Dust Mill #2	Baghouse BH-28	Yes
		Classifier-Dust Mill #2	Baghouse BH-34	Yes



### GRC Metal Division

GRC's Metal Division facility operates area source production/control devices that are subject to the NESHAP for Secondary Nonferrous Metals Processing. Three (3) affected sources have been identified at the Metals Division facility, one (1) furnace source (induction type furnace) and two (2) mill sources. The (2) Pontzen Mill sources share identical characteristics.

Three (3) baghouses are used to control emissions from these affected sources. One (1) baghouse provides control for the High-Temperature Induction Furnace. Two (2) baghouses provide control for the Pontzen Mills, one for each mill.

Both Pontzen Mills are of the same size and are operated in the same fashion. However, Pontzen Mill PM-2 has the greater output between the two. For 2007, the output from Pontzen Mill PM-2 was 16% greater than Pontzen Mill PM-1.

To demonstrate compliance with the rule, GRC will test the baghouse that controls emissions from the Induction Furnace as required by the rule. No identical source exists for the Induction Furnace. However, GRC proposes to test only the baghouse associated with Mill Group 2-M since Pontzen Mill PM-2 has a greater loading than Pontzen Mill PM-1 (Mill Group 1-M).

Testing to be performed at each baghouse will occur at the atmospheric discharge point. GRC will execute performance testing parameters as set forth in 40 CFR §63.11466 for each baghouse to be tested. This test calls for EPA Method 5 and the supporting test methods to acquire data for Method 5.

The outlet grain loading or baghouse efficiency data collected from Mill Group 2-M will then be used as data in lieu of ("DILO") testing for the remaining source, Mill Group 1-M. GRC would assume that the other baghouse discharge grain loading would be less than the tested source since the tested source has the greatest potential for loading. Additional testing of PM-1 will not be required if the tested source is within the limitations set forth in 40 CFR §63.11465(a) of either 0.015 gr/dscf or a 99.0% control efficiency or better.

**Table 2 – Testing for GRC's Metals Division Facility**

Source Group	Type of Source	Source ID	Emissions Control	Proposed Test
Furnace Group 1-M	Induction Furnace	IND-1	Baghouse BH-31	Yes
Mill Group 1-M	Pontzen Mill	PM-1	Baghouse BH-29	DILO (PM-2)
Mill Group 2-M	Pontzen Mill	PM-2	Baghouse BH-28	Yes



### **Considerations for Performance Testing and Notification of Compliance Status Report**

Our *Conditional Approval for a Test Waiver* at each GRC facility is based upon our review and consideration of the following:

1. EPA's September 30, 2005, National Stack Testing Guidance,
2. GRC's facility-specific test proposal for multiple area sources (February 22, 2008 letter and personal communication with Ms. Cynthia Kaleri on June 3 and June 5, 2008),
3. Performance testing requirements specified in 40 CFR 63.7(e) for demonstrating compliance, and
4. All baghouses, inspected weekly as required by the TCEQ permit for each facility, are also identical in terms of manufacturer, design and construction, operational parameters, and maintenance protocols (personal communications with Ms. Cynthia Kaleri on June 6 and June 10, 2008).

The following considerations apply to all emission sources, even those for which the particulate matter test is conditionally waived and data in lieu of testing is to be accepted:

#### **40 CFR § 63.11466(c)(2)**

**During the test, you must operate each emissions source within +/- 10% of the normal process rate. You must monitor and record the process rate during the test.**

*For those units not tested, please provide the normal process rate information for each unit in the Notification of Compliance Status report submitted to EPA. This information will be used in our final waiver determination (to evaluate process rates between all units and approve the DILO approach for each unit not tested).*

#### **40 CFR § 63.11467(e)**

**An initial inspection of the internal components of a baghouse is not required if an inspection has been performed within the past 12 months.**

*If any baghouse has been inspected within the last 12 months and will not be inspected as part of the initial compliance demonstration, please provide a summary of the results of the prior inspection in the Notification of Compliance Status report submitted to EPA. Although certain units will not be tested, as conditionally approved by EPA for particulate matter, inspections are still required as part of the initial compliance demonstration and the information will be used to ascertain the adequacy of the DILO approach.*